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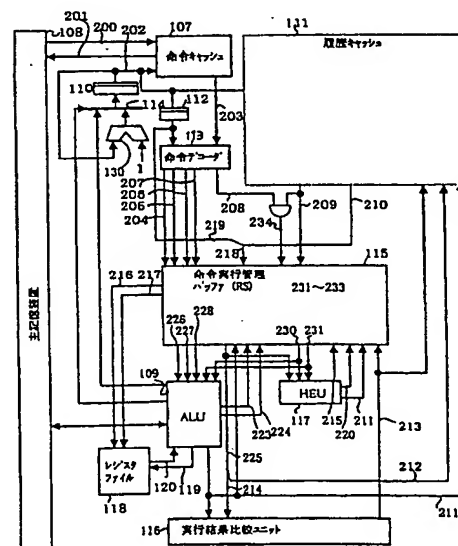
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(54)Title: INFORMATION PROCESSOR

(54)発明の名称 情報処理装置

(57) Abstract

In a conventional information processor which speculatively executing a succeeding instruction with a data-sensitive relation, a functional unit is used for the speculative execution. If the prediction is not right, the same functional unit is used again. That is to say, the frequency of usage of the functional unit is increased and there is a possibility of the processing time is lengthened because of the competition of use of the functional unit. Further, it is necessary to improve the correctness of the prediction. Therefore, there are provided a history functional unit which outputs instruction execution results in the past as the results of execution of the instruction and an instruction issuing circuit which issues an instruction whose operand is the same value as in the past to the history functional unit to omit the speculative execution. A guard cache in which the instruction addresses of the instructions whose prediction correctnesses are low are stored is provided in a history cache in which operation results are stored to prevent the instructions whose addresses are registered in the guard cache from being registered again in the history cache.



- 107 ... instruction cache
- 108 ... main memory device
- 111 ... history cache
- 113 ... instruction decoder
- 115 ... instruction execution control buffer (RS)
- 116 ... execution result comparing unit
- 118 ... register file